

# 2017 Summary Report to Members

*for the fiscal year ended June 30, 2017*

Serving  
Missouri's  
Public Schools  
Past, Present  
and Future

**PSRS/PEERS**

PUBLIC SCHOOL & EDUCATION EMPLOYEE  
RETIREMENT SYSTEMS OF MISSOURI

# Table of Contents

<b>SERVING MISSOURI'S PUBLIC SCHOOLS PAST, PRESENT AND FUTURE</b> .....	3
<b>INTRODUCTION</b> .....	4
<b>A SNAPSHOT OF PSRS/PEERS MEMBERS</b> .....	4
PSRS Active Member Profile .....	4
PEERS Active Member Profile.....	4
PSRS Total Membership .....	4
PEERS Total Membership .....	4
<b>RETIREMENT TRENDS</b> .....	5
PSRS Members Retiring By Year.....	5
PEERS Members Retiring By Year .....	5
Total PSRS Benefits Paid Over Time .....	5
Total PEERS Benefits Paid Over Time.....	5
<b>ABOUT OUR RETIREES</b> .....	6
PSRS 2016-2017 School Year Retirees .....	6
PEERS 2016-2017 School Year Retirees .....	6
<b>FUNDING STATUS AND VALUATION RESULTS</b> .....	7
PSRS Pre-Funded Percentage.....	8
PEERS Pre-Funded Percentage .....	8
Funding Sources .....	8
<b>ASSET ALLOCATION</b> .....	9
Total Fund Asset Allocation .....	9
<b>INVESTMENT PERFORMANCE</b> .....	10
Growth in Assets.....	10
Total Portfolio Returns .....	10
<b>TOP 10 STOCK HOLDINGS</b> .....	11
U.S. Public Equity - Top 10 Holdings .....	11
Non-U.S. Public Equity - Top 10 Holdings .....	11
<b>FINANCIAL STATEMENTS</b> .....	12
Statements of Fiduciary Net Position .....	12
Statements of Changes in Fiduciary Net Position.....	12
<b>SUMMARY</b> .....	13



Mt. Sterling Schoolhouse  
Mt. Sterling, Missouri  
1896 ~ 1963

## Introduction

PSRS/PEERS has helped more than 126,000 members and their families achieve financial security during retirement. We are dedicated to helping our current and future members achieve the financially secure retirement they deserve after a full career of service to Missouri's public schools and students.

## A Snapshot of PSRS/PEERS Members

While the average age and years of service among our working members have remained fairly constant over the past five years, average annual salaries have increased moderately, and total PSRS and PEERS membership continues to grow. As our membership grows, we remain dedicated to maintaining our financial strength and providing the highest level of service and retirement security to all of our members, now and in the future.

PSRS Active Member Profile					
	2017	2016	2015	2014	2013
Average Age	42.0	42.0	42.0	42.2	42.1
Average Years of Service	11.7	11.6	11.5	11.8	11.4
Average Annual Salary	\$60,643	\$59,005	\$58,582	\$58,876	\$57,135

PEERS Active Member Profile					
	2017	2016	2015	2014	2013
Average Age	48.3	48.3	48.4	48.6	48.1
Average Years of Service	8.5	8.6	8.6	8.9	8.5
Average Annual Salary	\$33,643	\$32,887	\$32,220	\$31,646	\$30,196

PSRS Total Membership					
	2017*	2016*	2015*	2014	2013
Active	78,274	78,129	78,318	75,168	78,076
Inactive	16,756	16,376	16,260	14,451	11,649
Retired	54,629	53,069	51,345	49,707	47,646
Disabled	981	957	892	859	843
Survivors	4,162	3,994	3,884	3,920	3,817
Total Membership	154,802	152,525	150,699	144,105	142,031

PEERS Total Membership					
	2017*	2016*	2015*	2014	2013
Active	47,953	47,851	46,864	45,589	48,709
Inactive	33,152	31,577	30,999	16,215	14,439
Retired	26,335	25,061	23,900	22,756	21,519
Disabled	804	782	767	735	709
Survivors	1,863	1,740	1,631	1,538	1,446
Total Membership	110,107	107,011	104,161	86,833	86,822

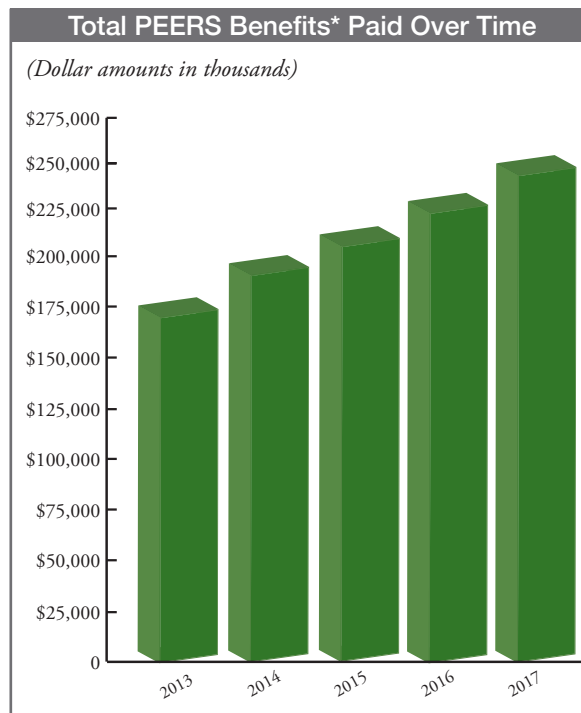
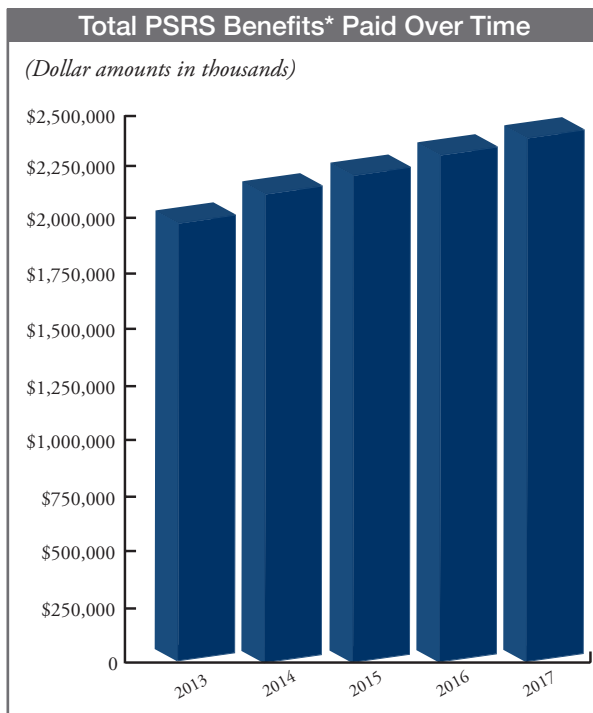
\*Inactive members includes vested and non-vested accounts, as well as terminated accounts.

## Retirement Trends

The total number of PSRS/PEERS retirees and amount of benefits paid each year continue to grow. In fiscal year 2017 (July 1, 2016 to June 30, 2017) we helped 4,624 individuals begin their retirement by providing them with PSRS/PEERS benefits.

PSRS Members Retiring By Year					
	2017	2016	2015	2014	2013
Number of Retirements	2,601	2,603	2,570	2,888	2,642
Average Age	59.0	59.1	59.3	58.8	58.9
Average Years of Service	22.5	22.3	22.3	23.5	23.2
Average Monthly Benefit	\$3,359	\$3,239	\$3,230	\$3,445	\$3,370

PEERS Members Retiring By Year					
	2017	2016	2015	2014	2013
Number of Retirements	2,023	1,903	1,884	1,919	1,656
Average Age	62.8	62.9	63.1	63.0	63.0
Average Years of Service	16.5	16.5	16.3	16.1	16.3
Average Monthly Benefit	\$844	\$826	\$813	\$793	\$763



\*Annual benefits paid to service retirees, disability retirees, and survivors. Includes PLSO Payments.

## About Our Retirees

We take great pride in the long-term strength and stability of the Systems. We believe our retired members, after a full career of service to our schools, students and communities, are deserving of the peace of mind that comes with knowing they will receive lifetime retirement benefits.

Most PSRS/PEERS benefit recipients are service retirees. Lifetime service retirement benefits are payable to members who have met age and service requirements. Disability benefits are provided for members who are unable to earn a livelihood due to permanent disability and who have met eligibility criteria. The Systems also provide death benefits to qualified beneficiaries of deceased members.

### PSRS 2016-2017 School Year\* Retirees

Years of Service at Retirement	Number of Retirees	Average Years of Service	Average Single Life Monthly Benefit	Average Age at Retirement
5 - 9.9	249	6.9	\$ 639	61.8
10 - 14.9	243	12.2	\$ 1,296	61.9
15 - 19.9	339	17.2	\$ 2,228	62.3
20 - 24.9	531	22.4	\$ 3,213	60.4
25 - 29.9	756	27.1	\$ 4,289	55.8
30 - 34.9	427	31.3	\$ 5,135	56.4
35 - 39.9	44	36.5	\$ 6,427	61.2
40+	12	41.4	\$ 6,881	65.0
Overall Average		22.5	\$ 3,359	59.0

### PEERS 2016-2017 School Year\* Retirees

Years of Service at Retirement	Number of Retirees	Average Years of Service	Average Single Life Monthly Benefit	Average Age at Retirement
5 - 9.9	558	7.2	\$ 255	63.4
10 - 14.9	425	12.3	\$ 483	64.1
15 - 19.9	339	17.4	\$ 802	63.9
20 - 24.9	363	22.3	\$ 1,157	61.6
25 - 29.9	209	27.2	\$ 1,690	60.1
30+	129	33.9	\$ 2,441	60.9
Overall Average		16.5	\$ 844	62.8

\* A school year runs July 1 to June 30.

The average 2016-2017 single life monthly benefit for new PSRS retirees is \$3,359 and for PEERS retirees is \$844. How much will your benefit be? Use our online Benefit Estimator located under Web Member Services at [www.psr-peers.org](http://www.psr-peers.org) to estimate your own monthly retirement benefit amount.

## Funding Status and Valuation Results

The PSRS/PEERS' Board of Trustees and staff take great pride in serving Missouri's public schools past, present and future. As part of that service, the Board evaluates a large amount of information each year including, but not limited to, the annual actuarial evaluations prepared by the Systems' external actuaries, PricewaterhouseCoopers, LLC.

During the 2016- 2017 fiscal year, the Board had a unique opportunity to evaluate and enhance the cost-of-living adjustment (COLA) policy and lowering the assumed rate of return on investments, while maintaining the Systems' financial security and stability for the present and future. The staff and the Board reviewed multiple scenarios to enhance the COLA policy, as well as lower the assumed rate of return on investments. A lower assumed rate of return decreases the risk profile of the plans, which was an important consideration when reviewing the COLA policy. It's important to note that decreased risk provides for greater stability of future contribution rates and COLAs.

The financial strength and stability of the Systems combined with a strong governance structure allowed such discussions to occur during one of the most challenging times for public pension plans across the nation.

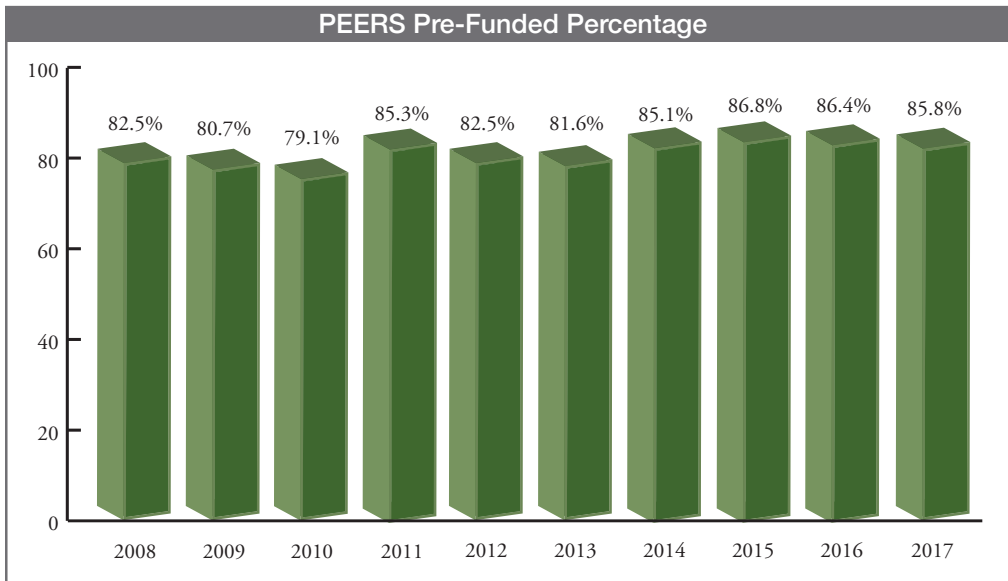
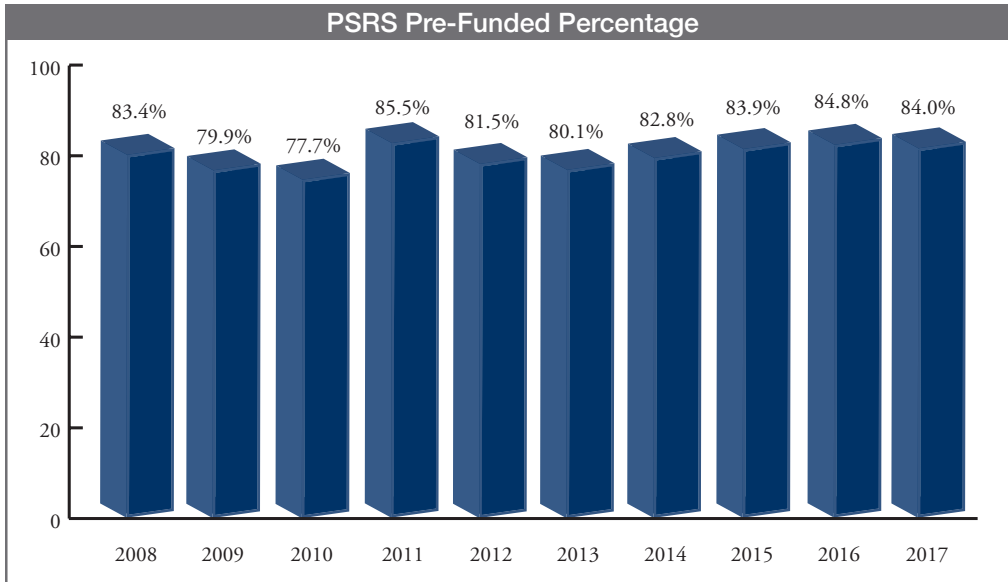
The Board of Trustees amended the Systems' Actuarial Funding Policies at their November 3, 2017 meeting. The Actuarial Funding Policy amendments included a change to the COLA policy and the assumed rate of return on investments. The Board of Trustees adopted a revision to the COLA policy effective with the January 1, 2019 COLA. The only change from the prior policy occurs when the CPI-U is between 0.0% and 2.0%. The prior policy indicated if the CPI-U was between 0.0% and 2.0%, the COLA would be 0.0%. The new policy provides a 2.0% COLA when the CPI-U is between 0.0% and 2.0%, and cumulatively reaches 2.0%. During the COLA policy review, the Board of Trustees approved a 1.63% January 1, 2018 COLA. The January 1, 2018 COLA is equal to CPI-U for the fiscal year ended June 30, 2017. The Board of Trustees also reduced the assumed rate of return from 7.75% to 7.6% effective with the June 30, 2017 actuarial valuations. The amendments were based on two critical elements that are at the forefront of all System decisions: the Board of Trustees' fiduciary responsibility and PSRS/PEERS' continuous goals.

Fiduciary responsibility includes the duties of loyalty and impartiality. The duty of loyalty requires the operation of the Systems for the exclusive benefit of the members and retirees of those Systems, and must supersede the interests of all other parties. The duty of impartiality requires that the Board not favor any one type of plan participant over another (e.g. active, inactive, retired members). The Board has a fiduciary duty to: 1. Effectively collect contributions, 2. Prudently invest the assets to obtain optimum returns, 3. Equitably provide benefits, 4. Impartially and in accordance with applicable law, administer the benefit program, and 5. Set contribution rates that are adequate to fund promised benefits.

PSRS/PEERS' continuous goals are: 1. Provide for the security and financial stability of the Systems, including maintaining at least an 80% pre-funded ratio, continuing to amortize the unfunded liability until PSRS/PEERS is 100% pre-funded, and allowing for a reasonable assumed rate of return given capital market estimates, 2. Maintain the contribution rates of both Systems at or below current levels, and 3. Provide a consistent COLA for PSRS/PEERS benefit recipients to maintain their purchasing power, noting COLAs should be dependable and affordable without harming the financial stability of the Systems.

The Systems' funding objective continues to achieve a funded ratio of 100% over a closed 30-year period. For this purpose, funded ratio is defined as the actuarial value of assets divided by the actuarial accrued liability determined under the entry age normal cost method and the actuarial assumptions adopted by the Board of Trustees. As of June 30, 2017, PSRS was 84.0% pre-funded, while PEERS was 85.8% pre-funded. Both Systems' showed a slight decrease in funding from the June 30, 2016 funded percentage of 84.8% for PSRS and 86.4% for PEERS. The changes in funded status are primarily due to the investment return assumption being lowered and the future COLA assumption being increased because of changes to the COLA policy. The assumption changes were partially offset by favorable investment experience. Additional information on actuarial assumptions and funding can be found in the actuarial section of the *Comprehensive Annual Financial Report*. Based upon the June 30, 2017 valuations and overall financial projections, the Board of Trustees set the fiscal year 2019 contribution rates at the fiscal year 2018 level for both members and employers.

How do we determine how well funded the Systems are? By comparing the actuarial value of assets to the amount of benefit promises made to members. This comparison shows the pre-funded status of the Systems, or in other words, the plans' ability to pay projected benefits with today's dollars. As of June 30, 2017, PSRS was 84.0% pre-funded, while PEERS was 85.8% pre-funded.



Actuarial value of assets as a percentage of actuarial accrued liabilities

### Funding Sources

The investment portfolios of PSRS and PEERS represent all contributions to the plans, from members and their employers, as well as all net earnings on these assets. These funds are held in support of both current and future liabilities. In total, approximately 61¢ of every dollar used to pay retirees is generated from investment earnings.

### 20-Year Average



Note: The 20¢ includes member contributions and service purchases.



## Asset Allocation

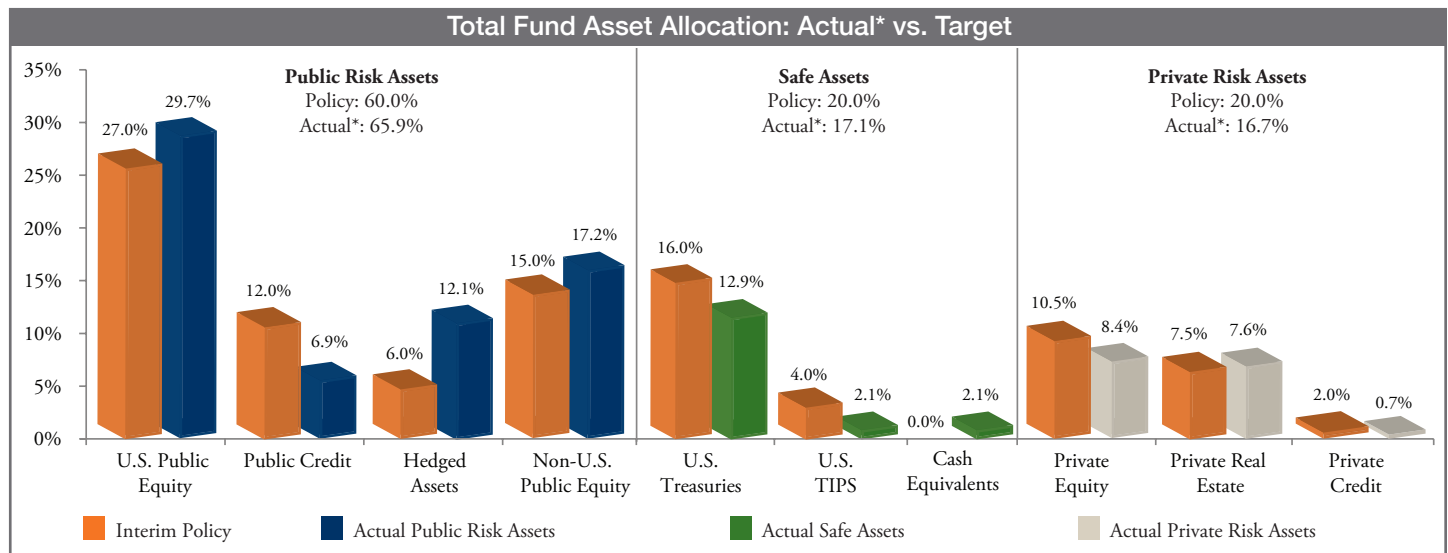
The internal investment staff, under the direction of the PSRS/PEERS' Board of Trustees, has adopted a disciplined and diversified investment portfolio that includes allocations to multiple asset classes. Over time, every specific asset class within the PSRS/PEERS' investment portfolio performs a valuable function.

In fiscal year 2017, the combined asset allocation provided the Systems with substantial absolute returns, led by above average returns from global stocks. U.S. stocks returned 18.5% for the fiscal year ended June 30, 2017 (as measured by the Russell 3000 Index), non-U.S. developed stocks moved 20.3% higher (as measured by the MSCI EAFE Index), and emerging market stocks increased 23.8% (as measured by the MSCI Emerging Markets Index). In contrast, while interest rates remained near historical lows throughout the year, the yield on the 10-year Treasury Bond did increase from 1.5% at the beginning of the fiscal year to 2.3% on June 30, 2017. This increase in yield contributed to negative absolute returns for the PSRS/PEERS' Safe Asset Portfolio (U.S. Treasury Bonds and U.S. Treasury Inflation Protection Securities).

The PSRS/PEERS non-traditional asset classes also provided strong returns in fiscal year 2017. The Hedged Asset Program represented 12.1% of total fund assets at fiscal year-end and generated a 9.6% return. The objective of the Hedged Assets Program is to provide competitive returns, diversification and lower volatility (risk) than the Systems' stock portfolios. Diversification into private equity, private real estate and private credit proved beneficial for the year as the Private Equity Composite returned 20.1%, the Real Estate Composite increased 8.9%, and the Private Credit Composite increased 23.6%.

As noted above, significant absolute returns in most of the major asset classes contributed to the 12.5% return for PSRS and PEERS. Additionally, the investment returns were supported by solid implementation (security selection) and tactical asset allocation decisions. For example, the PSRS/PEERS' Public Credit Portfolio outperformed its benchmark (Barclays U.S. Intermediate Credit Index) by 1.7% in fiscal year 2017, while the PSRS/PEERS' Real Estate Portfolio outperformed its benchmark (NFI-ODCE Index) by 2.0%. From a portfolio construction and tactical standpoint, the internal investment staff maintained a modest underweight to safe assets (Treasury bonds) throughout the year (due to historically low interest rates) and a significant overweight to stocks (both U.S. and non-U.S.). Additionally, within the global stock allocation, the Systems were overweight to emerging market stocks relative to Europe. The underweight to safe assets and the overweight to stocks for the fiscal year provided meaningful contribution to the overall PSRS/PEERS return.

The Systems' asset allocation as of fiscal year-end, was as follows:



\*Total Plan assets include 0.3% invested in an operating cash account that is not reflected in the chart above.

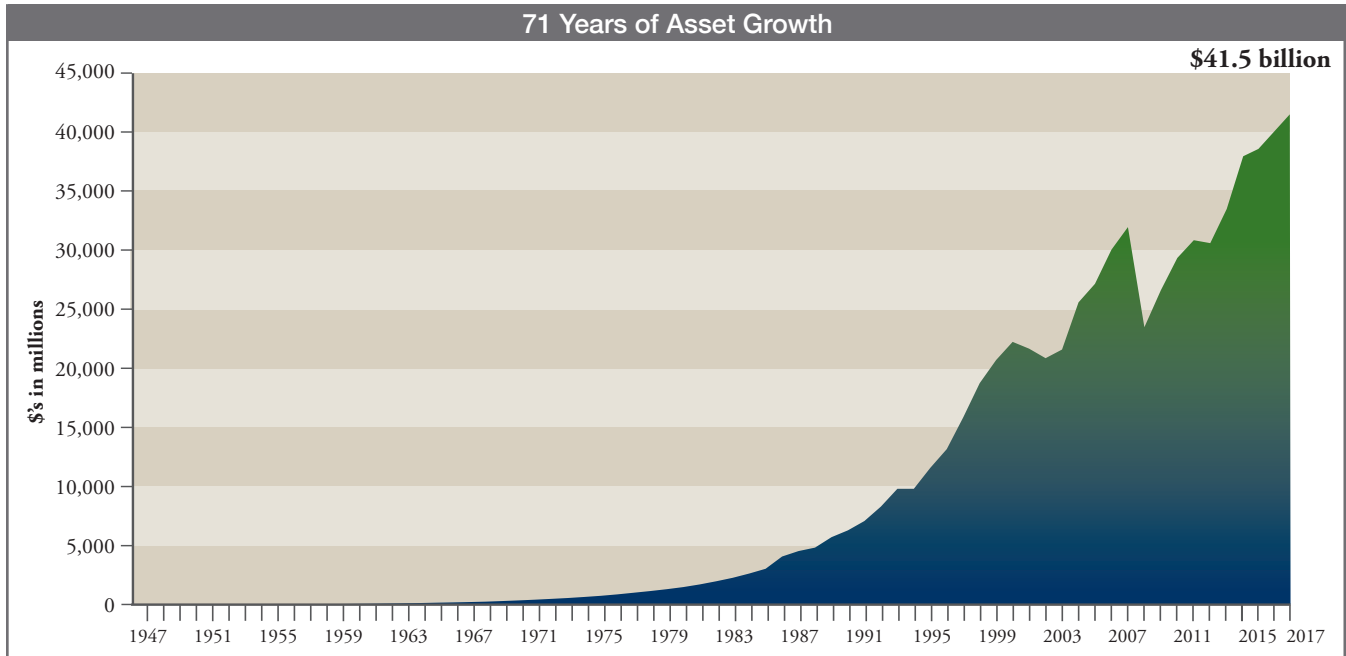
The interim policy allocations have been established to reflect the continued funding of Private Risk Assets and progress toward the Systems' long-term asset allocation objective. For performance measurement purposes, the interim policy will serve as the basis for establishing the Total Fund policy benchmark until the on going process of funding Private Risk investments is meaningfully complete. For fiscal year 2017 the interim policy allocation was 60% Public Risk Assets, 20% Safe Assets and 20% Private Risk Assets. Within each broad policy target, the Board has established sub-asset class targets. For example, as the chart above indicates, the target allocation to U.S. Public Equity was 27% as of June 30, 2017. Internal staff utilized the flexibility built into the investment policy to strategically overweight or underweight certain asset classes throughout the year. Strategic decisions within the Public Risk Assets program included an overweight to U.S. equities and Non-U.S. equities, which provided meaningful returns to the Systems in fiscal year 2017.

# Investment Performance

Prudent and cost-efficient management of investments is a major tenant of the PSRS/PEERS investment program. Our investment staff has produced consistent and stable investment returns over long periods of time that exceed the actuarial assumed rate of return.

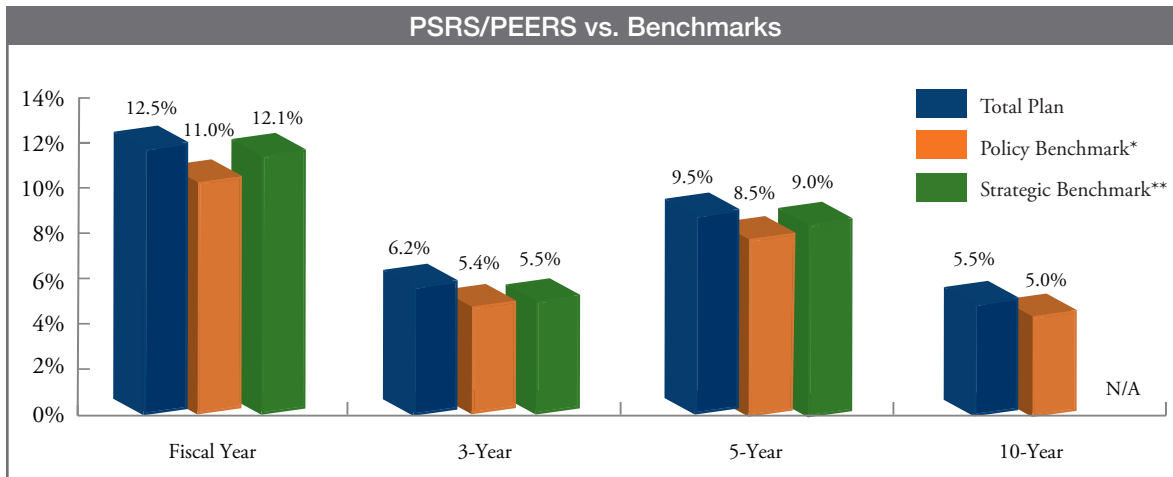
The Systems' total invested assets were \$41.5 billion as of June 30, 2017. There has been a long-term growth in assets since the inception of PSRS in 1946 and PEERS in 1965, as shown in the graph below.

## Growth in Assets



## Total Portfolio Returns

The fiscal year 2017 return was 12.5%, which exceeded the policy benchmark by 150 basis points. The fiscal year investment return, net of all fees and expenses, was 12.3%, which was also significantly above the policy benchmark. The total fund return has exceeded the policy benchmark in seven of the last 10 fiscal years, an indication that internal staff and active investment management have added value to the Systems. Over the past five years, the total fund return has exceeded the policy benchmark by 100 basis points, on an annualized basis, resulting in over \$1.6 billion in excess performance (net of all investment expenses and fees) to the Systems.



\*As of June 30, 2017: 39.0% Russell 3000 Index, 16.5% MSCI ACWI ex-USA Index, 16% Barclays US Treasury Index, 15% Barclays U.S. Intermediate Credit Index, 7.5% NFI-ODCE, 4% Barclays U.S. TIPS 1-10 Years Index, and 2% Merrill Lynch High Yield Master II Index.

\*\*As of June 30, 2017: 41.3% Russell 3000 Index, 20.4% MSCI ACWI ex-USA Index, 13.1% Barclays US Treasury Index, 12.9% Barclays U.S. Intermediate Credit Index, 7.6% NFI-ODCE, 2.7% Merrill Lynch 3-Month U.S. Treasury Bill Index, 1.3% Barclays U.S. TIPS 1-10 Years Index, and 0.7% Merrill Lynch High Yield Master II Index. The Total Plan Strategic Benchmark changes monthly based on the actual asset allocation at the end of the previous month. It was established more recently so a 10-year return is not available.

## Top 10 Stock Holdings

The top 10 U.S. stock holdings as of June 30, 2017 are shown in the table below.

U.S. Public Equity - Top 10 Holdings		
Top 10 Largest Holdings* June 30, 2017	Fair Value	% of Total U.S. Public Equity
Johnson & Johnson	\$ 112,386,573	0.9%
Alphabet, Inc.	90,797,772	0.7%
Amazon.com, Inc.	79,555,080	0.7%
JPMorgan Chase & Co.	78,271,213	0.6%
Merck & Co.	73,995,630	0.6%
PepsiCo, Inc.	72,053,518	0.6%
Bank of America Corp.	71,687,475	0.6%
Facebook, Inc.	68,051,215	0.6%
Wal-mart Stores, Inc.	65,684,564	0.5%
Apple, Inc.	62,958,199	0.5%
<b>TOTAL</b>	<b>\$ 775,401,239</b>	<b>6.3%</b>

\* Includes only actively managed separate accounts.

A complete list of portfolio holdings is available upon request.

The following table displays the top 10 non-U.S. stock holdings as of June 30, 2017.

Non-U.S. Public Equity - Top 10 Holdings		
Top 10 Largest Holdings* June 30, 2017	Fair Value	% of Total Non-U.S. Public Equity
Nestle SA	\$ 62,616,648	0.9%
Roche Holding AG	56,132,213	0.8%
ING	44,809,337	0.6%
Bayer AG	42,859,958	0.6%
Hoya Corp.	39,770,926	0.6%
AIA Group Ltd.	39,096,619	0.5%
Samsung Electronics Ltd.	37,414,144	0.5%
Compass Group	35,017,281	0.5%
Canadian National Railway Co.	34,148,441	0.5%
Taiwan Semiconductor Ltd.	33,010,176	0.5%
<b>TOTAL</b>	<b>\$ 424,875,743</b>	<b>6.0%</b>

\* Includes only actively managed separate accounts

A complete list of portfolio holdings is available upon request.

## Financial Statements

The Statements of Fiduciary Net Position present information on the assets and liabilities of the Systems, with the difference between the two reported as net position. The net position of the Systems reflect the resources available to pay benefits to members when due. Over time, increases and decreases in net position measure whether the Systems' financial position is improving or deteriorating.

Statements of Fiduciary Net Position				
<i>(As of June 30, 2017 with comparative totals for June 30, 2016)</i>				
	PSRS	PEERS	Combined Totals	
			June 30, 2017	June 30, 2016
<b>ASSETS</b>				
Cash	\$ 119,922,113	\$ 19,214,380	\$ 139,136,493	\$ 88,946,114
Receivables	1,937,379,875	231,307,865	2,168,687,740	1,927,463,876
Investments, at fair value	37,487,008,806	4,470,553,571	41,957,562,377	38,436,723,452
Invested securities lending collateral	251,096,575	29,932,451	281,029,026	407,969,041
Prepaid expenses	110,800	-	110,800	308,247
Capital assets, net of accumulated depreciation	24,004,180	-	24,004,180	25,214,511
<b>TOTAL ASSETS</b>	<b>39,819,522,349</b>	<b>4,751,008,267</b>	<b>44,570,530,616</b>	<b>40,886,625,241</b>
<b>LIABILITIES</b>				
	2,539,276,286	304,590,259	2,843,866,545	2,575,324,734
<b>NET POSITION - RESTRICTED FOR PENSIONS</b>				
	<b>\$ 37,280,246,063</b>	<b>\$ 4,446,418,008</b>	<b>\$ 41,726,664,071</b>	<b>\$ 38,311,300,507</b>

The Statements of Changes in Fiduciary Net Position show the incoming revenue (additions) and outgoing expenses (deductions) of the Systems throughout the fiscal year.

Statements of Changes in Fiduciary Net Position				
<i>(For the year ended June 30, 2017 with comparative totals for the year ended June 30, 2016)</i>				
	PSRS	PEERS	Combined Totals Year Ended	
			June 30, 2017	June 30, 2016
<b>ADDITIONS</b>				
Employer contributions	\$ 684,857,718	\$ 111,239,585	\$ 796,097,303	\$ 777,511,066
Member contributions	719,625,373	118,446,790	838,072,163	819,043,231
Net investment income	4,104,109,747	485,046,845	4,589,156,592	593,491,202
Other income	13,504	22	13,526	6,430
<b>TOTAL ADDITIONS</b>	<b>5,508,606,342</b>	<b>714,733,242</b>	<b>6,223,339,584</b>	<b>2,190,051,929</b>
<b>DEDUCTIONS</b>				
Monthly benefits	2,471,214,464	251,077,530	2,722,291,994	2,606,962,019
Refunds of contributions	50,617,935	18,190,571	68,808,506	74,335,191
Administrative expenses	10,496,287	6,365,275	16,861,562	18,529,150
Other expenses	1,425	12,533	13,958	15,388
<b>TOTAL DEDUCTIONS</b>	<b>2,532,330,111</b>	<b>275,645,909</b>	<b>2,807,976,020</b>	<b>2,699,841,748</b>
<b>NET INCREASE (DECREASE) IN NET POSITION</b>	<b>2,976,276,231</b>	<b>439,087,333</b>	<b>3,415,363,564</b>	<b>(509,789,819)</b>
<b>NET POSITION - RESTRICTED FOR PENSIONS</b>				
Beginning of year	34,303,969,832	4,007,330,675	38,311,300,507	38,821,090,326
End of year	<b>\$ 37,280,246,063</b>	<b>\$ 4,446,418,008</b>	<b>\$ 41,726,664,071</b>	<b>\$ 38,311,300,507</b>

## Summary

The ongoing goals of PSRS/PEERS Board, management and staff take us into a new fiscal year with a renewed dedication to providing the best possible level of member service; secure, stable retirement benefits; and forward-looking strategies to ensure we can continue to provide the retirement security our members deserve.

The PSRS/PEERS investment platform is one of the keys to our success, and it has provided long-term results that have benefited *past* members of the Systems. We believe that through strong Board governance and an adherence to a disciplined and prudent investment process, PSRS/PEERS can continue to maximize *risk-adjusted* returns and continue to successfully provide long-term results for our *present* and *future* members.



**Summary Report to Members** for  
the fiscal year ended June 30, 2017

PSRS/PEERS is pleased to present the  
**2017 Summary Report to Members** for  
the fiscal year ended June 30, 2017.  
This report highlights information from  
our most recent **Comprehensive Annual  
Financial Report**. Printed copies of the  
comprehensive report are available upon  
request, or may be viewed online at  
[www.psr-speers.org](http://www.psr-speers.org).

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**PSRS/PEERS**

PUBLIC SCHOOL & EDUCATION EMPLOYEE  
RETIREMENT SYSTEMS OF MISSOURI